Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of Deployment of Wireline Services Offering Advanced Telecommunications Capability	PECEIVED CC Docket No. 98-147 JUL 1 2 1999 FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY
TO SPRIN	BC COMMUNICATIONS INC. I CORPORATION'S NSIDERATION AND /OR CLARIFICATION
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SUMMARY

Sprint's collocation proposals would (1) prevent incumbent LECs ("ILECs") from protecting their equipment and networks, (2) prevent carriers and the States from considering space reservation requirements that protect all users of incumbent LECs' networks, and (3) prevent carriers and the States from implementing reasonable collocation provisioning periods that reflect actual experience. Contrary to Sprint's requests, the Commission should continue to allow ILECs to cage or similarly protect their equipment and should continue to allow ILECs, competitive LECs ("CLECs"), and States to move forward with the development of policies for the reservation of space and for provisioning intervals.

Concerning cageless collocation, the Commission allowed ILECs to take reasonable steps to protect their own equipment, "such as enclosing the equipment in its own cage." This Commission ruling directly rebuts Sprint's argument that SBC and other incumbent LECs may not require "the physical separation of collocator equipment from ILEC equipment." The structures to which Sprint objects are used by SBC and other incumbent LECs to enclose some of their equipment, as the Commission expressly allowed, and in so doing of course to physically separate ILEC and collocator equipment. Contrary to Sprint's unsupported statement, this security measure does not prevent unused space from being available to CLECs for collocation.

Also contrary to Sprint's argument, the Commission did not require incumbent LECs to commingle CLEC equipment in the same bays in which incumbents have equipment. With such commingling, it would be very difficult and impractical to keep the parties' equipment, and thus networks, separate, and maintaining equipment and network security would be impossible. Instead, the Commission ordered incumbent LECs to offer unused space in increments as small as needed for one bay of equipment, and SBC does so.

In its previous comments in this proceeding, unlike in its current Petition, Sprint recognized the ILEC security concerns that would result from its proposal for commingling of equipment and stated that "with adequate escort procedures, this should not present any unusual security problems to the ILEC." (emphasis added) In its current Petition, Sprint makes no

mention of this need for escorts to provide ILEC security, and does not provide any information to justify a change in position. In the *Advanced Services 1st Report and Order*, the Commission not only rejected Sprint's commingling proposal in favor of single bay increments of space, but also did not allow ILECs to require escorts.

Next, in its reservation of space proposal, Sprint ignores the needs not only of ILECs but also of CLECs to reserve space for transport equipment for a sufficient time to decrease the likelihood that they will run out of space before more may become available. In addition, Sprint ignores the technical requirements that must be met for common system equipment in order to maintain central offices that can efficiently achieve their potential capacity and meet the continuing needs of all users of central offices, including CLECs. These needs can be met only if the growth path of such common system equipment is kept clear for reasonable periods far exceeding the one-year limit that Sprint recommends. Sprint's proposal would bring inefficient uses of space, higher costs, and increased delays, which would disserve the needs of all users of ILEC central offices, including both ILECs and CLECs, and be in direct conflict with the Commission's goals in the *Advanced Services 1st Report and Order*.

The Commission also should deny again Sprint's request to adopt uniform nationwide provisioning intervals. Sprint has not shown, and SBC is not aware of, anything that has happened since the release of the *Advanced Services 1st Report and Order* on March 31, 1999 that could have changed the Commission's view about the States' role concerning provisioning intervals. Sprint does not even attempt to show that the States are not taking these issues seriously. In SBC's experience, the States very aggressively ensure that collocation alternatives are provisioned in a timely manner.

In response to Sprint's assertions on adjacent-space collocation, the Commission should ensure that its definition of "premises" subject to ILEC collocation requirements and its adjacent space requirements are not inadvertently expanded. Finally, concerning spectrum management, the Commission should reject Sprint's proposal that ILECs always be the point of contact for inter-CLEC charges of service degradation.

For all the reasons discussed, the Commission should reject Sprint's proposals.

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
)	CC Docket No. 98-147
Deployment of Wireline Services Offering)	
Advanced Telecommunications Capability)	

OPPOSITION OF SBC COMMUNICATIONS INC. TO SPRINT CORPORATION'S PETITION FOR PARTIAL RECONSIDERATION AND /OR CLARIFICATION

SBC Communications Inc., on behalf of Southwestern Bell Telephone Company ("SWBT"), Pacific Bell, Nevada Bell, and Southern New England Telephone ("SNET"), hereby opposes Sprint Corporation's Petition for Partial Reconsideration and/or Clarification of the Commission's *First Report and Order* released March 31, 1999 in the above-captioned proceeding ("Advanced Services 1st Report and Order").

Sprint has not made any showing that could justify the changes it seeks in the Commission's rulings in the *Advanced Services* 1st Report and Order. Instead, Sprint merely repeats (and in one case distorts) proposals it made in its previous comments in this proceeding and repeats unsupported and incorrect general allegations against incumbent LECs.¹ Accordingly, there is no basis for adopting Sprint's proposals. Moreover, as explained below, Sprint's proposals would create substantial harm to the public interest. Contrary to Sprint's requests, the Commission should continue to allow incumbent LECs to cage or similarly protect

 $^{^{1}}$ E.g., Sprint at 6 and 8. (All cites to Sprint are to its instant Petition, unless otherwise stated).

their equipment and should continue to allow incumbent LECs ("ILECs"), competitive LECs ("CLECs"), and States to move forward with the development of policies for reservations of space and provisioning intervals.

I. Sprint's proposed rule changes would prevent incumbent LECs from taking reasonable steps to protect their own equipment.

A. Incumbent LECs are allowed to enclose their equipment.

Sprint states: "Sprint requests the Commission to clarify that ILECs may not require the construction of a wall or similar structure to separate ILEC equipment from CLEC equipment under cageless collocation arrangements. Sprint makes this request due to recent attempts by BellSouth and SBC to require such costly and inefficient constructions and to refuse CLECs' requests to commingle CLEC equipment in the same bays that house ILEC equipment."²

In a failed attempt to support its request, Sprint quotes a number of provisions from the Advanced Services 1st Report and Order but conveniently leaves out the one provision that is on point. In that provision, concerning cageless collocation, the Commission stated that "[t]he incumbent LEC may take reasonable steps to protect its own equipment, such as enclosing the equipment in its own cage, and other reasonable security measures as discussed below." This Commission ruling directly rebuts Sprint's argument that SBC and other incumbent LECs may not require "the physical separation of collocator equipment from ILEC equipment." The structures to which Sprint objects are used by SBC and other incumbent LECs to enclose some

³ Advanced Services 1st Report and Order at para. 42 (emphasis added).

² Sprint at 4.

⁴ Sprint at 5. The only exception that Sprint would allow would be for electrical interference between CLECs' and incumbent LECs' equipment. Sprint at 6. Electrical interference would be an equipment safety issue, which subject is dealt with separately by the Commission. Sprint ignores the legitimate security issues that the Commission addressed.

of their equipment, as the Commission expressly allowed, and the structures of course physically separate ILEC and collocator equipment.

Sprint's objections are not only legally incorrect but also factually wrong. Contrary to Sprint's unsupported statement that this action to enclose ILEC equipment "limit[s] the amount of available collocation space," this security measure does not prevent unused space from being available to CLECs for collocation. Moreover, contrary to Sprint's statement that this action does not provide any legitimate benefit to the ILEC,6 this security measure helps provide protection of incumbent LEC equipment, which protection the Commission not only has allowed but has recognized as "crucial to the incumbents' own ability to offer service to their customers."7

В. CLECs are not allowed to commingle their equipment in the same bays that house ILEC equipment.

Sprint similarly ignores and distorts the most relevant provisions of the Advanced Services 1st Report and Order when Sprint states that competitive LECs ("CLECs") have the right to "commingle CLEC equipment in the same bays that house ILEC equipment." Actually, the Commission stated: "We require incumbent LECs to make collocation space available in single-bay increments, meaning that a competing carrier can purchase space in increments small enough to collocate a single rack, or bay, of equipment." Accordingly, the Commission did not require incumbent LECs to commingle CLEC equipment in the same bays in which incumbents have equipment. To do so would produce substantial inefficiency, as personnel from both the

⁵ Sprint at 6. ⁶ *Id*.

⁷ Advanced Services 1st Report and Order at para. 48.

⁸ *Id.* at para. 42.

⁹ *Id.* at para. 43.

CLEC and the incumbent LEC attempted to work on the same bay of equipment. Under that scenario, it would be very difficult and impractical to keep the parties' equipment, and thus networks, separate, harming both competition and customer service. Moreover, maintaining equipment and network security would be impossible. Instead, the Commission ordered incumbent LECs to offer unused space in increments as small as needed for one bay of equipment, and SBC does so.

In its previous comments in this proceeding, unlike in its current Petition, Sprint recognized the ILEC security concerns that would result from its proposal for commingling of equipment. Sprint stated: "Another liberalized form of collocation is a variant of virtual or cageless collocation, in which a requesting carrier can install and maintain its own equipment, not in separate equipment bays, but commingled with the ILEC and or CLEC equipment. Sprint believes that this may be entirely feasible and with adequate escort procedures, this should not present any unusual security problems to the ILEC."

In its current Petition, Sprint makes no mention of this need for escorts to provide ILEC security, and does not provide any information to justify a change in position. In the *Advanced Services 1st Report and Order*, the Commission not only rejected Sprint's commingling proposal in favor of single bay increments of space, but also did not allow ILECs to require escorts. If the Commission adopted Sprint's current proposal, the security risks previously admitted by Sprint would be created without the protection sprint previously admitted would be needed. By failing this time to include the security concerns and its proposed escort solution, Sprint has distorted its own position and submitted a disingenuous proposal. Clearly, the Commission once

¹⁰ Comments of Sprint Corporation, filed September 25, 1998, in the instant proceeding, at 14-15 (emphasis added).

¹¹ Advanced Services 1st Report and Order at para. 49.

again should reject Sprint's request for a requirement that ILECs allow CLECs to commingle their equipment in the same bays.

II. Sprint's proposed rule changes would prevent carriers and the States from considering space reservation requirements that protect all users of incumbent LECs' networks.

Sprint requests that the Commission require (1) "incumbents and collocators to limit any reservation of collocation space to one year and only if that reservation is made pursuant to specific business plans to utilize that space" and (2) "incumbent LECs claiming that physical collocation space is exhausted at a central office, to detail to a state commission the portion of unavailable space that the incumbent has reserved for its own or any of its affiliates' future use and provide a description of the specific future uses for which the incumbents have reserved that space."12

In its Petition, Sprint explains that in its comments in this proceeding it already "urged the Commission to permit ILECs to reserve space needed for their network needs for one year (on a rolling basis)."¹³ Sprint's Petition adds nothing of any substance to its previous argument, which continues to be without merit. Sprint ignores the role of the States in determining space disputes on a case by case basis. Sprint also ignores the needs not only of ILECs but also of CLECs to reserve space for transport equipment for a sufficient time to decrease the likelihood that they will run out of space before more may become available. In addition, Sprint ignores the technical requirements that must be met for common system equipment in order to maintain central offices that can efficiently achieve their potential capacity and meet the continuing needs

¹² Sprint at 7. Sprint at 8.

of all users of central offices, including CLECs. These needs can be met only if the growth path of such common system equipment is kept clear for reasonable periods far exceeding one year.

The States have a major role in determining space reservation issues together A. with other space shortage issues.

As Sprint acknowledges, reservations of space affect the point at which a central office is exhausted of space that can be used for physical collocation. The Commission has pointed out that to avoid providing physical collocation under the 1996 Act, "Section 251(c)(6) requires the incumbent LEC to demonstrate to the state commission's satisfaction that there are space limitations on the LEC premises or that technical considerations make collocation impractical."14 The Commission has found that space limitation issues "are best handled on a case-by-case basis" because they "will vary considerably depending on the location at which competitor equipment is to be collocated." Accordingly, the Commission has required incumbent LECs to "provide the state commissions with detailed floor plans or diagrams of any premises where the incumbent alleges that there are space constraints" and to allow CLECs to tour such premises and have disputes reviewed and resolved by the States. 17

Sprint has failed to provide any evidence that the state commissions are not carrying out this task or that their requirements are lenient toward incumbent LEC reservations of space. In fact, in SBC's experience, States are aggressively ensuring that incumbent LECs justify claims of space shortages by showing and explaining their uses of space, including reservations of space.

¹⁴ Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499, para. 602 (1996) ("Local Competition Order").

15 Id.

¹⁷ Advanced Services 1st Report and Order at para. 57.

B. A reasonably balanced approach is needed for space reservations, in order to protect the interests of all service providers and their customers.

Reasonable decisions about reservations of space must be based not only on the importance of providing physical collocation to CLECs in the near term but also on the importance of allowing both ILECs and CLECs to reasonably reserve space to meet the future needs of their customers. Sprint does not attempt to balance these interests but instead asks the Commission arbitrarily to adopt a one-year reservation limit.

The Commission has recognized the need for a balancing of interests. In the Local Competition Proceeding, the Commission stated:

"Incumbent LECs are allowed to retain a limited amount of floor space for defined future uses. Allowing competitive entrants to claim space that incumbent LECs had specifically planned to use could prevent incumbent LECs from serving their customers effectively. Incumbent LECs may not, however, reserve space for future use on terms more favorable than those that apply to other telecommunications carriers seeking to hold collocation space for their own future use." 18

Sprint's proposed one-sided approach would fail to meet the needs of either ILECs or CLECs to serve their customers. This failure can be seen by reviewing what is actually involved in properly reserving space in ILEC central offices in order to maintain service to an ever increasing number of customers.

Customers served by incumbent LECs are both retail and wholesale customers. Wholesale customers include CLECs who purchase collocation space in order to interconnect to the incumbent LEC or to access the incumbent LEC's unbundled network elements and, in turn, serve their own retail and wholesale customers. All these customers rely on the incumbent LEC's ability to provide effective service. This ILEC

¹⁸ Local Competition Order at para. 604 (emphasis added).

service can be divided into two parts: (1) transport, which requires ILEC equipment that is the same or "similar" to the transmission equipment that CLECs collocate (e.g., multiplexers and fiber optic terminals); and (2) switching and other functioning needed in common by various types of customers ("common system equipment"), which requires ILEC equipment that is "dissimilar" to the equipment that CLECs collocate (e.g., stand-alone host switches, main distributing frames, and power or digital cross-connect equipment).

ILECs and CLECs have similar reservation of space needs concerning the first group of "similar" equipment. They need to be able to reserve space for transport equipment long enough so that, if the ILEC runs out of space in the central office, there will be a reasonable chance that the ILEC may have added more space by the time the reserved space runs out. For instance, Pacific Bell estimates that the building of an addition to a central office normally takes two to three-plus years and construction of a new central office normally takes three and one-half to four years. ¹⁹ Therefore, regarding Pacific Bell's offices, the minimum period that either ILECs or CLECs should be allowed for reservations of space for their transport equipment should be two years. Accordingly, before the California PUC, Pacific Bell has recommended that reservations of space for this "similar" equipment be set at current year plus two. The one-year reservation period recommended by Sprint would create a substantial shortfall from the period

Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks, R.93-04-003, California Public Utilities Commission ("CPUC"), Declaration of Ross K. Ireland in Support of Pacific Bell's Petition to Modify D.98-12-069, March 10, 1999, p. 6, attached hereto as Exhibit A. In Decision 98-12-069 in this state proceeding, the CPUC adopted an interim space reservation requirement of one year for "similar" equipment and five years for "dissimilar" equipment. On March 24, 1999, Pacific Bell filed a Petition to Modify that Decision, and on June 17, 1999, Pacific Bell filed a Motion to Amend the Petition to Modify, seeking a compromise of current year plus two for "similar" equipment and ten years for "dissimilar" equipment.

required for expansions and could result in held orders for critical transport services for both retail and wholesale customers.²⁰

CLECs do not need to reserve space for the second group of "dissimilar" equipment since they do not collocate such equipment. CLECs, like other ILEC customers, however, depend on ILECs having sufficient reservation periods for the dissimilar equipment because this common system equipment is used in providing service to the CLECs as well as other customers. For technical reasons, ILECs cannot place collocators in the growth path of such common system equipment, without destroying the ultimate capacity and efficiency of that equipment. The technical requirements for growth of this type of equipment include, for example, the need for contiguity, for meeting distance limitations, and for various elements of the equipment to be configured in specific ways, which require contiguous growth space. Sprint ignores all these factors when it requests that the Commission adopt the one-year space reservation proposal in its Petition, just as Sprint did when making the same proposal in its previous comments.

²⁰ Id. at Exhibit A hereto.

²¹ Examples of such services include, among others: A host switch provides CLECs with unbundled switch port capacity and the ability to resell existing services. DCS systems provide interoffice trunking facilities and connection facilities. Central office power plants provide a protected and continuous source of power for Pacific's equipment and collocated CLEC's equipment. The MDF is critical in provisioning for access to unbundled links. Id.

²² See id. at 3-5.

²³ Comments of Sprint Corporation, filed September 25, 1998, in the instant proceeding, at 18. Sprint unreasonably would place no limits on the amount of space CLECs could reserve, so long as they interconnect some collocated equipment to the ILEC's network in offices nearing space exhaust. *See id.* at 18-19.

If ILECs run out of technically-required growth space in central offices because of inappropriate placement of collocators in the central offices, ILECs will not be able to attain the utilization specifications of common system equipment and, thus, will not be able to support as much traffic, including collocation traffic, in the existing central offices. Therefore, ILECs would need to prematurely build new wire centers or expand existing ones.²⁴ Because of the time needed for new construction, additional service to customers, including collocators, likely would be delayed. Moreover, this waste of resources would raise costs for all users of the central offices, including the costs of collocation. Any required premature construction of new wire centers would require CLECs to collocate in more central offices to receive access to the same services and to the same end users as was available from the original office prior to exhaust.²⁵

These inefficient uses of space, higher costs, and increased delays would disserve the needs of all users of ILEC central offices, including both ILECs and CLECs, and be in direct conflict with the Commission's goals in the *Advanced Services 1st Report and Order*. Therefore, the Commission once again should reject Sprint's proposal.

III. Sprint's proposed rule changes would prevent carriers and the States from implementing reasonable collocation provisioning periods that reflect actual experience.

Sprint requests that the Commission adopt minimum provisioning intervals of 90 calendar days from the date a CLEC submits its application to the ILEC to the date in which the CLEC is able to physically collocate, "if previously conditioned or prepared space is available,"

For instance, Pacific Bell believes that placing a five year reservation limit on contiguous space for this common system equipment would cause premature exhaust in Pacific Bell central offices, leading to a significant increase (recent estimate is that a 43% increase could occur) in building additions. Pacific Bell also believes that construction of 8 new wire centers would be accelerated by a period of five to six years. *See* Exhibit A hereto at 5.

²⁶ See, e.g., Advanced Services 1st Report and Order at paras. 42-43, 52-55.

and 180 calendar days if such space is not available.²⁷ This is the exact same proposal that Sprint made in its previous comments in this proceeding.²⁸ In the Advanced Services 1st Report and Order, the Commission already fully considered this issue and concluded: "We do not adopt specific provisioning intervals at this time. We have adopted several new collocation rules in this Order, and we do not yet have sufficient experience with the implementation of these new collocation arrangements to suggest time frames for provisioning."29

Sprint does not, and cannot, allege that the Commission subsequently has obtained that necessary experience. In fact, Sprint does not add any facts, arguments, or other information to the record, from which the Commission might consider changing its mind.

In the Advanced Services 1st Report and Order, the Commission "urge[d] the states to ensure that collocation space is available in a timely and pro-competitive manner that gives new entrants a full and fair opportunity to compete."30 The Commission expressed confidence in state commissions in this regard and pointed out that "[s]everal state commissions have taken significant steps to lessen the time periods within which incumbent LECs provision collocation space."31

Sprint has not shown, and SBC is not aware of, anything that has happened since the release of the Advanced Services 1st Report and Order on March 31, 1999 that could have changed the Commission's view about the states' role concerning provisioning intervals. Sprint does not even attempt to show that the States are not taking these issues seriously. In SBC's

²⁷ Sprint at 10.
²⁸ Comments of Sprint Corporation, filed September 25, 1998, in the instant proceeding, at 17.

²⁹ Advanced Services 1st Report and Order at para. 54.

 $^{^{30}}$ *Id.* at para. 55.

³¹ *Id.* at para. 54.

experience, the States are very aggressive in their desires to have both the old and the new collocation alternatives provisioned in a timely manner.

As the Commission recognizes, provisioning intervals must reflect actual experience with collocation arrangements. The conclusions drawn from that experience should reflect different conditions of demand and space availability in different areas, and intervals may need to be adjusted over time as more experience is obtained. Moreover, various individualized local office factors can affect provisioning interval needs, including among others: (1) whether the available space is active conditioned space or inactive unconditioned space; (2) whether or not power is available for the available space; and (3) whether the ILEC or the CLEC will be installing the bays and racking. These varying conditions and factors can best be dealt with by continuing to allow carriers and States to address provisioning issues, not through nationwide uniformity of rules. Accordingly, the Commission should deny Sprint's request and again decline to adopt uniform nationwide provisioning intervals.

IV. The Commission should ensure that its definition of "premises" subject to ILEC collocation requirements and its adjacent space requirements are not inadvertently expanded.

Purportedly to resolve a dispute with Bell South, Sprint alternatively requests that the Commission "modify the definition of 'premises' itself to include physical structures (such as an ILEC central office building) and all of the land and buildings owned or leased by an ILEC surrounding such structures."³² Sprint's stated goal is merely to attempt to uphold, not expand, the Commission's adjacent space requirements in paragraph 44 of the Advanced Services 1st Report and Order. 33

³² Sprint at 4. 33 Sprint at 2.

If the Commission makes any change in its definition of "premises," it is essential that it carefully (1) retain the limitations in that definition to buildings or similar structures that house ILEC network facilities,³⁴ (2) retain the limitation that adjacent-space collocation requirements apply only "when space is legitimately exhausted in a particular LEC premises,"³⁵ and (3) retain the limitation that adjacent-space collocation applies only to space on ILEC property that is truly adjacent to the defined ILEC buildings and structures. Loss of those limitations would result in takings of ILEC property beyond what Congress authorized³⁶ and arbitrary and capricious requirements not intended by the Commission or supported in the record.

V. Concerning spectrum management, the Commission should reject Sprint's proposal that ILECs always be the point of contact for inter-CLEC charges of service degradation.

Regarding certain of the Commission's spectrum management requirements,³⁷ Sprint suggests that the ILECs should always be the point of contact for inter-CLEC claims of service degradation.³⁸ The Commission should reject this proposal. SBC has no objection to contacting the CLEC if SBC determines that the CLEC is the cause of the service degradation problem. However, the ILECs should not be placed in the position of mediating between CLECs, particularly in situations where the ILEC's service is unaffected and where the ILEC is not the cause of the degradation. In those situations, the contacts should be the responsibility of the

³⁴ The Commission defines "Premises" as follows: "'Premises' refers to an incumbent LEC's central offices and serving wire centers, as well as all buildings or similar structures owned or leased by an incumbent LEC that <u>house its network facilities</u>, and all structures that <u>house incumbent LEC facilities</u> on public rights-of-way, including but not limited to vaults containing loop concentrators or similar structures." 47 CFR section 51.5 (emphasis added).

³⁵ Advanced Services 1st Report and Order at para. 44.

 $^{^{36}}$ E.g., collocation requirements are limited to "equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier..." 47 U.S.C. section 251(c)(6).

³⁷ Advanced Services 1st Report and Order at para. 75.

³⁸ Sprint at 6-7.

CLECs who should have the responsibility for resolving those problems among themselves. To the extent Sprint is requesting otherwise, the Commission should reject Sprint's request.

VI. Conclusion

For all the above reasons, the Commission should deny Sprint's Petition. Sprint merely repeats unsupported and incorrect general allegations against incumbent LECs that could not possibly justify the changes Sprint seeks in the Commission's rulings in the *Advanced Services* 1st Report and Order. Moreover, such changes would be contrary to the public interest. The Commission should continue to allow incumbent LECs to cage or similarly protect their equipment and should continue to allow incumbent LECs, CLECs, and States to develop policies for reservations of space and provisioning intervals.

Respectfully submitted,

SBC COMMUNICATIONS INC.

 $\mathbf{R}\mathbf{v}$

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July 12, 1999

EXHIBIT A

EXHIBIT A

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Rulemaking on the Commission's Own Motion to Govern Open Access to Bottleneck Services and Establish a Framework for Network Architecture Development of Dominant Carrier Networks	R.93-04-003
Investigation on the Commission's Own Motion into Open Access and Network Architecture Development of Dominant Carrier Networks	I.93-04-002
Order Instituting Rulemaking on the Commission's Own Motion Into Competition for Local Exchange Service	R.95-04-043
Order Instituting Investigation on the Commission's Own Motion Into Competition for Local Exchange Service	I.95-04-044

DECLARATION OF ROSS K. IRELAND IN SUPPORT OF PACIFIC BELL'S PETITION TO MODIFY D.98-12-069

I, Ross K. Ireland, declare:

- 1. My business address is 2600 Camino Ramon, Room 4CN100, San Ramon, CA 94583. My position is Vice President-Network Planning and Engineering for Pacific Bell, Nevada Bell, Southwestern Bell Telephone and Southern New England Telephone.
- 2. I am responsible for evolution and transition engineering of SBC Communications' eight-state switched and private line network. My responsibilities include network planning, network engineering and engineering methods and procedures for wire line in-region services. In addition, I direct all loop feeder planning and engineering for the eight-state territory (Arkansas,

California, Connecticut, Kansas, Missouri, Nevada, Okiahoma, and Texas). I am responsible for an organization of approximately 3,000 employees comprised almost entirely of technical staff, engineers and managers responsible for network planning and engineering, including equipment space planning and installation.

- 3. My educational background and work experience are as follows: I studied aeronautical engineering at San Francisco City College and graduated from the Stanford Executive Program in 1989. I began my career with Pacific Bell in 1966 and held various technical and management positions until 1973 when I transferred to Bell Laboratories as an instructor in switching engineering. Upon returning to Pacific Bell in 1975, I progressed through various operating and staff assignments until I was appointed Assistant Vice President Technology planning in 1988. In 1991 I was appointed General Manager Network Services and later became Vice President Network Technology. In 1993, I took on additional responsibilities as Director of Telesis Technologies Laboratory, Inc. I was appointed to my current position in April, 1997, following the merger between SBC Communications Inc. and Pacific Telesis.
- 4. I have personal knowledge of the facts stated herein and, if called as a witness, could and would testify truthfully thereto.
- 5. Pacific Bell has constructed and turned over to collocators 800 cages in over 250 central offices, with over 200 cages presently in the pipeline. Pacific Bell has relocated work groups and eliminated administrative offices, break rooms and bathrooms in order to create space for physical collocation. Pacific Bell has not missed a single cage turnover date since August of 1998. Pacific Bell has made available to CLECs virtual collocation, common area collocation, cages of non-standard sizes, and interconnection from adjacent on-site and off-site locations.

Pacific Bell has taken extraordinary steps to make both physical and virtual collocation available to our CLEC customers.

- 6. For technical reasons, Pacific Bell cannot place collocators in the growth path of certain central office equipment, such as main distributing frames (MDFs), power, digital cross connect systems (DCS) and host switches. Further, Pacific Bell cannot place collocators in the growth path of transmission equipment based on the shortened growth time frame of 12 months, versus the 24 months that Pacific has historically applied as a minimum. Longer time periods may be required on the building work required to relieve the exhaust conditions.
- 7. Host switching equipment, power plants, and DCS have manufacturer specified technical design constraints that limit how equipment growth additions can be provided. These design limitations require that the equipment layout for growth be planned for the ultimate expected size of the equipment. For example, if the ultimate size of a central office was projected to be 100,000 access lines, the switch and power equipment need to be planned accordingly. There are also technical constraints related to the placement of the MDF as further described in paragraph 11. Even though all of the switch capacity, power, and MDF may not be installed initially, the layout for future growth must permit the necessary expansion and augmentation ("growth path").
- 8. Host switching machines and digital cross-connect systems are large, processor controlled network systems comprised of a number of discrete network components with differing functions, such as the communications module, line control modules, switch modules, etc. The manufacturers have specified critical internal distance limitations for those network modules in relation to each other. The placement of collocators among these modules is not technically feasible because of the design constraints of the host switch and DCS equipment.

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- 9. For example, the switch processor must be in the first line-up of the 5E Switch. The line control module must be within 50 feet of the line group controller. The maintenance access position must be within 50 feet from the input/output bay and within 125 feet of the administrative module. The communications module, the administrative modules, integrated ring nodes, and switch modules must all be within 400 feet of each other. The switch requires an isolated ground, which is a unique requirement in relation to the rest of the equipment in the central office. If the switch is spread out, the possibility of interference with the isolated ground is increased, which can degrade the operation of the switch.
- 10. As mentioned above, the DCS have similar design characteristics to a switch in that they include a number of discrete network components with differing functions. The vendor specifications for these discrete network components such as the controller bay, switch bay, and interface bay of the various digital cross-connect systems used in central offices requires a set configuration and cabling. Placement of collocators among these modules would technically constrain the growth of the digital cross-connect systems and essentially cap the equipment, thus stranding usable capacity. Interrupting the designed growth patterns of either the host switch or the digital cross-connect systems could prematurely cap these systems, which would or could trigger building additions and/or modifications. In some cases, an office could be totally exhausted and a new wire center would have to be constructed.
- 11. The capacity of an MDF is directly linked to the host switch in a one to one ratio.

 Limiting the growth of a frame, by placing collocators in the growth path, would correspondingly limit the size and growth of a switch. Pacific has two major concerns regarding non-contiguous frame growth. Frames are placed directly over cable vaults because of the required access to the vault. If a frame grows in a non-contiguous manner, building modifications may be needed to

create new accesses and egresses to the vault. In addition, the capacity of a non-contiguous frame is diminished because of the required tie pairs to connect the multiple frames.

- Pacific and CLECs. If collocators are placed in the growth path of a power plant, multiple or divided power plants could be required, assuming space is available. Multiple power plants create problems in the balance and flow of electricity. Non-contiguous growth can result in a resistance mismatch that develops because of the difference in paralleled feeder cable lengths. The resistance mismatch can lead to switch service degradation as a result of an imbalance in current sharing between the parallel feeders supplying a single switch. In addition, a power plant requires special building modifications for the unique air exchange rate units and the floor loading that may not be possible in other locations of a central office. The resolution of service problems can also be hindered when a single power plant is partitioned in multiple locations.
- based on the inherent vendor technical limitations associated with these common network systems. The goal of this process is to ensure the efficient use of floor space in a manner that will allow the office to realize its full capacity potential. As indicated in the preceding paragraphs, the introduction of collocators into the growth path of a host switch, DCS, MDF, or power plant is not practical for technical reasons. Further, Pacific believes the Commission Order will cause premature exhaust in Pacific Bell central offices, leading to a significant increase (current estimate is that a 43% increase could occur) in building additions. Pacific Bell also believes that construction of 8 new wire centers would be accelerated by a period of five to six years. See Attachment 1 to my declaration (results are based on a sample of 37 central offices). Additionally, the resulting shortfall between the Commission's 12 month space reservation policy and the actual

building of an addition (two to three-plus years) or construction of a new office (three and one-half to four years) could result in held orders for critical transport services for wholesale and retail customers.

- 14. The common systems host switch, DCS, MDF, and power are not limited to Pacific's retail service offerings, but rather are of equal benefit to wholesale customers. A host switch provides CLECs with unbundled switch port capacity and the ability to resell existing services. DCS systems provide interoffice trunking facilities and connection facilities. Central office power plants provide a protected and continuous source of power for Pacific's equipment and collocated CLEC's equipment. The MDF is critical in provisioning for access to unbundled links. Thus, wholesale customers would be harmed if common systems are capped and stranded by collocation being placed in the ultimate growth footprint of the common systems. Any required construction of new wire centers would require CLECs to collocate in more central offices to receive access to the same services and end users available from the original office prior to exhaust.
- 15. Pacific Bell's end user customers would also be harmed. They could face planned interruptions of service due to wire center splits. Wire center splits can affect the dialing plans of Centrex customers as well as require the customer to purchase additional trunking services between the new and existing office to maintain their current plan. Additional area code exhaust pressure will be created from the new central office codes required for the additional wire centers. End users could also face the possibility of held orders as described above.

BUILDING ADDITIONS

Pacific Bell Historical (1994-1998) (626 Wire Centers Total)	14		
	PMO* Study	New CPUC Rules	% Increase
Projected (1999-2011) (37 Wire Center Sample)	44**	63**	43.2%

NEW WIRE CENTERS

Pacific Bell Historical (1994-1998) (626 Wire Centers Total)	2	
	PMO Study	New CPUC Rules
Projected (1999-2011) (37 Wire Center Sample)	17	17
# New Wire Centers Advanced	+	8
Average # Years Advanced		5.4 Years

^{*} PMO is the Present Method of Operation for Space Reservation for Central Office Equipment.

^{**} Multiple Building Additions are required in many Wire Centers over the 12 year study period.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated: 3-10-99

Ross R. Ireland

CERTIFICATE OF SERVICE

I, Katie M. Turner, hereby certify that the foregoing, "OPPOSITION OF SBC COMMUNICATIONS INC. TO SPRINT CORPORATION'S PETITION FOR PARTIAL RECONSIDERATION AND/ OR CLARIFICATION" in CC Docket No. 98-147 has been filed this 12th day of July, 1999 to the Parties of Record.

Katie M. Turner

July 12, 1999

Service List

James W. Hedlund Sprint Corporation 1850 M Street, N.W., 11th Floor Washington, D.C., 20036